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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,796	10/08/2003	Stephen Brian Gates	81230.97US1	6632

34018 7590 12/14/2005

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EXAMINER

DINH, DUC Q

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/681,796	<b>Applicant(s)</b> GATES ET AL.	
	<b>Examiner</b> DUC Q. DINH	<b>Art Unit</b> 2674	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/08/03</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 28 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 19 recites the limitation “the graphical user interface having activateable elements for causing control data signals to be transmitted in the second control mode and wherein the instructions cause the graphical user interface to be hidden when the controlling device is in the first control mode”. Although the specification does mention EL controller interface 418 (in page 9, lines 19-23), there is no support in the specification for the quoted limitation above. The examiner examines the applications as best understanding of the claim languages.

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “graphical user interface” in claim 28 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2, 5-13, 15-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (U.S Patent No 6,466,154), hereinafter Kim in view of Lu (US 2003/0107552 A1).

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In reference to claim 1 Kim discloses a controlling device (Fig. 4A-4D) for controlling a PC and one or more home appliances, the controlling device comprising;

a wireless transmitter for sending control data to the PC and one or more home appliances (col. 2, lines 60-65; Figs. 4A-4D).

a user interface for at least partially enabling the first control mode and the second control mode (buttons 110, include television operating buttons 111 and mouse buttons 112 col. 2, lines 60-65; Figs. 4A-4D);

wherein the controlling device transmits signals via the wireless transmitter to control the PC in the first control mode (computer mouse mode) and transmits signals via the wireless transmitter to control the one or more home appliances (television remote control mode) in the second mode (col. 3, lines 5-25; Figs. 4A-4D).

Accordingly, Kim discloses everything except a sensor for activating a first control mode and a second control mode based on interaction of the control device with a surface;

Lu discloses a computer mouse with dual functionality including a sensor for activating a first control mode and a second control mode based on interaction of the control device with a surface [0030-0031].

It would have been obvious for one of ordinary skill in the art at the time of the invention to provide a sensor for switching from one function to another, i.e.: activating a first control mode to a second control mode based on interaction of the control device with a surface in the device of Kim in view of the teaching of Lu because it would provide a control device that can avoid inadvertent operations between computer and home appliances.

In reference to claim 2, Kim discloses the wireless transmitter comprises a first wireless transmitter (140; Fig. 4D) and a second wireless transmitter (240; Fig. 5A), the first wireless transmitter being associated with the first control mode (remote control mode) and the second wireless transmitter being associated with the second control mode (mouse mode; Col. 3, lines 5-40).

In reference to claim 5, Lu discloses the controlling device is automatically configured to operate in the first control mode based on user interaction with the controlling device ([0013 and 0031]).

In reference to claim 6, Lu discloses the user interaction comprises causing the sensor of the controlling device to interact with the surface [0031].

In reference to claim 7, Lu discloses the controlling device is automatically configured to operate in the second control mode based on user interaction with the controlling device ([0013] and [0032])

In reference to claim 8, Lu discloses the controlling device the user interaction comprises causing the sensor of the controlling device to be removed from the surface ([0031] another way to switch from one function to another is to detect that the mouse is no longer bounded to the surface and instead is held at hand and such sensor is well known in the art and [0032]).

In reference to claim 9, Lu discloses the sensor additionally provides for a determination of whether the controlling device is being used to interact with a surface, or has been removed from the surface [0031, see rejection as applied to claim 8 above].

In reference to claim 10, Lu discloses determination that the controlling device is being used to interact with a surface causes activation of the first control mode, i.e.: mouse desk bound mode [0032].

In reference to claim 11, Lu discloses the determination that the controlling device has been removed from the surface causes activation of the second control mode ([0032] and [0033]).

In reference to claim 12, Kim discloses the user interface comprises a button based user interface (buttons 110 of Fig. 4A; col. 2, lines 60-65).

In reference to claim 13, Kim discloses the button based user interface comprises at least one hard button (button 111 in Fig. 4B).

In reference to claim 15, Lu discloses the sensor for activating a first control mode additionally functions to at least partially enable the first control mode (activate the desk top mouse mode partially enable the first switch of the mouse).

In reference to claim 16, Kim discloses the first control mode is a mouse based control mode (col. 3, lines 15-25).

In reference to claim 17, Kim discloses second control mode is a remote control based control mode (col. 3, lines 4-13).

In reference to claim 18, Kim discloses a controlling device for controlling first and second appliances (see rejection as applied to claim 1), the controlling device comprising;

a transmitter (140) for sending control data signals; and

wherein the controlling device is configured to automatically switch between a first control mode wherein the controlling device is adapted to transmit control data signals via the

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transmitter to control functions of the first appliance (personal computer) and a second control mode wherein the controlling device is adapted to transmit control data signals via the transmitter to control functions of the second appliance (col. 3, lines 5-25).

Accordingly, Kim discloses everything except a sensor for determining a position of the controlling device relative to a surface and the control device adapted to transmit control data signals via the transmitter to control functions of the second appliance function of the position of the controlling device relative to the surface as determined using the sensor.

Lu discloses a computer mouse with dual functionality including a sensor for determining a position of the control device relative to a surface (16, see Fig. 3).

It would have been obvious for one of ordinary skill in the art at the time of the invention to provide the sensor for determining the position of the controlling device relative surface to toggle device in first and second operation modes in the device of Kim in view of the teaching of Lu because it would provide a control device that can avoid inadvertent operations between computer and home appliances.

In reference to claim 19, Kim discloses the controlling device as recited in claim 18, wherein the first appliance is a personal computer (col. 3, lines 20-25).

In reference to claim 20, Kim discloses the control signals transmitted in the first control mode function to move a PC cursor (col. 3, lines 20-22).

In reference to claim 21, Lu discloses least one of the control signals transmitted in the second mode functions to move a PC cursor [0029].



Claims 22-27 are method and computer instructions claims corresponding to the apparatus of claims 1-2, 5-13 and 15-21 and therefore, rejected based on the same basis set forth in said claims.

6. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (U.S Patent No 6,466,154), hereinafter Kim in view of Lu (US 2003/0107552 A1) as applied to claims 1-2, 5-13, 15-27 above and further in view of Meyer (U.S Patent No 6,882,334).

In reference to claims 3 and 4, Kim discloses the remote controller integrated with mouse using optical link for wireless transmitter. However, the combination of Kim and Lu does not disclose the first wireless transmitter is an RF wireless transmitter and the second wireless transmitter is an IR transmitter.

Meyer discloses a controlling device for controlling a PC and one or more home appliances using either the Radio Frequency (RF) transmitter or Infrared (IR) transmitter as the wireless transmitter to control the personal computer and one or more home appliances (col. 5, lines 14-19, 41-45; Fig. 3).

It would have been obvious for one of ordinary skill in the art at the time of the invention to recognize the use to Radio Frequency (RF) transmitter or Infrared (IR) transmitter as the wireless transmitter to control the personal computer and one or more home appliances would increase the mobility of the system, i.e.: provide out of sight control in the case of using the Radio Frequency transmitter; or and provide high quality control signal and low cost for the system in the case the Infrared transmitter is used.

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7. Claims 14 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (U.S Patent No 6,466,154), hereinafter Kim in view of Lu (US 2003/0107552 A1) as applied to claims 1-2, 5-13 and 15-27 and further in view of Lueders (U.S Patent No. 6,067,074).

In reference to claims 14 and 28, the combination of Kim and Lu does not disclose the button based user interface comprises an EL panel and a graphical user interface having active elements for causing the control data signals to be transmitted to the system. Lueders discloses a button based user interface using an EL panel (34; Fig. 2) with graphical user interface having active elements provided on the panel (Fig. 4-5 and 8; col. 4, lines 32-43; col. 6, lines 41-51).

It would have been obvious for one of ordinary skill in the art at the time of the invention to provide the EL panel with the graphical user interface provided thereon in the control unit of Kim and Lu in view of the teaching of Lueders because it would provide users a friendly control panel for controlling including an array of pressure sensitive dots responding to a graphical input giving the users new options to select for accomplishing desired function (col. 2, lines 62-65).

### ***Conclusion***


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DUC Q DINH whose telephone number is (571) 272-7686. The examiner can normally be reached on Mon-Fri from 8:00.AM-4:00.PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edouard Patrick can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DUC Q DINH  
Examiner  
Art Unit 2674



**PATRICK N. EDOUARD**  
**SUPERVISORY PATENT EXAMINER**

DQD  
November 30, 2005